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DETERMINANTS OF ADULT ENROLLMENT IN TELEVISED COLLEGE-CREDIT COURSES, PART 1--SOCIAL CHARACTERISTICS AND REACTIVE BEHAVIOR.

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THIS IS PART ONE OF A STUDY WHICH DEALT WITH SOME ASPECTS OF THE STRATEGY AND MOTIVATION OF ADULTS FOR EARNING COLLEGE CREDITS BY ENROLLING IN COURSES OFFERED BY THE COLLEGE OF GENERAL STUDIES OF THE UNIVERSITY OF PENNSYLVANIA. THE STUDY INVESTIGATED THE USE OF TELEVISION AS A MEDIUM OF INSTRUCTION. THE RESEARCH INSTRUMENT WAS A 28-ITEM QUESTIONNAIRE COVERING A RANGE OF SOCIOLOGICAL CHARACTERISTICS, REASONS FOR SEEKING CREDITS OR DEGREES, PRIOR COLLEGE EDUCATION, AMOUNT OF COLLEGE EDUCATION OF SPOUSE AND FRIENDS, PREFERENCES FOR ON-CAMPUS OR TELEVISED COURSES, AND DISTANCE OF RESIDENCE FROM THE CAMPUS. THIS QUESTIONNAIRE WAS MAILED TO APPROXIMATELY 250 ADULTS WHO HAD ENROLLED FOR TELECAST COURSES. A PARALLEL-ITEM QUESTIONNAIRE WAS PREPARED FOR ADULTS ENROLLED IN ON-CAMPUS COURSES. DATA FROM THESE QUESTIONNAIRES WERE ANALYZED. THEORETICAL ASPECTS OF RESPONSES CLASSIFIED AS REACTIVE BEHAVIOR AND GENERAL CONCLUSIONS DRAWN FROM THE STUDY ARE DISCUSSED IN PART TWO OF THIS STUDY (ED 003 188). (WB)

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DETERMINANTS OF ADULT ENROLLMENT IN TELEVISED COLLEGE-CREDIT COURSES

Part I : Social Characteristics and Reactive Behavior

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Charles F. Hoban

I. DESIGN

This study deals with some aspects of the strategy and motivation of adults for earning college credits by enrolling in courses offered by the College of General Studies of the University of Pennsylvania. The College of General Studies is the University's agency for the liberal education of adults pursuing their studies on a part-time basis.

The study is thus a study of strategy and motivation in the liberal education of adults. The fact that it deals with the use of television as a medium of instruction is both incidental to the broader problem of liberal education of adults and critical to the problem of strategy. Within this framework, the significance of the instructional technology of television is in the creation of an alternative strategy of instruction and student choice between strategies.

The term strategy is used here to mean a general plan for the achievement of a goal. Within this definition, specific activities which implement the general plan become tactics. By so defining strategy, it is possible to concentrate on broad plans of instruction offered to students by an educational institution, and to disregard as irrelevant to the problem a wide range of activities (tactics) which students use in implementing the broad plan. It is also possible to formulate the problem in terms of choice (decision between alternatives) of strategy, to relate each choice to differential characteristics of students, and to ignore many of the conventional indices of student achievement, such as grades, and concentrate instead on their precondition of course enrollment.

The term motivation is used to mean the expectation of satisfaction from goal-oriented striving.* It may well be argued that such expectations are taught in cultural transmission or learned from prior life experience of reward or punishment of classes of behavior, but how an expectation develops is not as important here as the expectation itself. Some evidence is at hand in this and a prior study (4) that expectations undergo change in the course of college-credit seeking, that goals are modified, and that satisfactions are derived from the intellectual and aesthetic content of courses as well as, in addition to, or independent of, the accretion of college credits per se.

Alternative Strategies

The two strategies for earning college credits are (1) the formalized interpersonal communication situation of the campus classroom during late afternoon or evening hours, and (2) what has been regarded as a mass communication situation of televised instruction in which an aggregate of students, often unknown to each other or to the teacher, view the teaching performance at home on a television screen, generally at 6:30 a.m.

In the on-campus situation the basic time unit of instruction is 50 minutes. In the television situation the 50-minute unit is reduced to 30 minutes. In both situations, course examinations are administered on the campus. Class size may vary independent of the strategy, e.g., 35 or more people may constitute an on-campus class, and 15 or fewer a television class, or vice versa.

Essential differences in these strategies are found in the nature of student-teacher confrontation, i.e., presence of the teacher versus electronic representation of the teacher; direction and interaction of the information flow; kind and amount of information received by the students; feedback information received by the teacher; hour of class attendance;

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* This concept of motivation is taken from McKeachie's paper, presented at the 1961 Nebraska Symposium on Motivation. (6)

socialized vs. individualized student participation; physical setting of both teacher and student participation; and to-and-from campus mobility.

These are sufficiently different to constitute different plans, i.e., different strategies, of activity for achieving the goal of course credits. An institutionally approved arrangement, sequence and quantity of course credits qualifies a student for conferral of an undergraduate or professional (e.g., law) degree. As will be presented later, some adults who enroll in on-campus or telecast courses have a college or University degree, either undergraduate or professional. However, the vast majority of enrollees in either strategic alternative have no college degree, and, for them, college credits per se or credits earned for the specific purpose of progression toward a degree attain a kind of functional autonomy just as a degree itself may become functionally autonomous. If and when such functional autonomy displaces the true goal of college education, the ceremony of conferral is akin to a tribal rite.

Limitation of Choice of Strategy

The limited number of televised courses (two per semester) restricts the area of choice, and thus the number of people choosing. This restriction is not as severe as might be supposed. Approximately half of the adults enrolling in televised courses are or have not been otherwise enrolled in the College of General Studies (4). This means that half the number of adults enrolled in the televised courses are drawn from a population enrolled in other colleges or universities, or not otherwise enrolled in any other college or university. The size of the potential student body of televised courses is difficult to estimate, except in terms of indeterminate magnitude greater than the actual number of enrollees per term. Among other things, this study is intended to identify differentiating characteristics of televised course enrollees so that, if educational policies permit, recruitment efforts can be directed with some precision toward a larger population with these characteristics.

Limitations on Credits

Two limitations are imposed on number of credits to be earned by enrollment in the telecast courses. The one is the maximum of 16 such credits,

or their equivalent in the recently adopted unit system, that can be applied to fulfillment of CGS degree requirements. The other is the policy of other colleges or universities in accepting credits earned in televised courses offered by the College of General Studies. These limitations are not difficult to live with. Exceptions can generally be made as justified, and policies have a way of being formulated by drifting along until a threat to the status quo is clearly evident to its guardians. Adoption of an iron rule generally follows this exercise in vigilance.

Motivation

Course credits are instrumental in satisfying some need of the individual. Enrollment in college courses is an activity pattern, or indication of an activity pattern, of striving for need reduction and attendant satisfaction. The motivational problem is to identify the needs reduced (satisfaction derived) by the process of earning college credits by adults enrolled on a part-time basis.

In a prior study of the enrolled, viewing, and interested potential audiences of the televised courses (broadcast under the rubric of Television Seminar), satisfactions expressed by course enrollees and viewers in interviews were categorized as (a) personal adequacy and elaboration, (b) social approval and admiration, and (c) self-discipline and tenacity (4). All three of these can be related to the broad existential need for "self-actualization," or to the currently fashionable "search for identity." They can also be related to "need for achievement," "need for creativity," "need for affiliation," and/or "need for power." These broad classes of needs (or goals) have little immediate or discernible usefulness without an elaborate program of psychological measurement and a system of sorting students and developing teaching procedures consistent with these needs. However, one suspects that the absence of such a program and appropriate pedagogy is costly in terms of college drop-out.

The approach to motivation in this study involves the categorization of answers to questions of why enrollees enroll for credit, and why they want a college degree. This approach results in (a) a functional typology of adults

who enroll in on-campus and televised courses according to their stated reasons, and (b) a thematic analysis of the basic concerns (threats or anxieties) as stated by adults who engage in the formal educational process as a constructive procedure to reduce them.

The motivational problem will be discussed in detail in Part II of this report.

Problem Formulation, Sampling, and Data Analyses

The problem of choice of strategy, presented in preceding pages, is a reformulation of the original problem proposed for this research study. As originally formulated, the problem was that of identifying determinants of persistent and occasional enrollees of telecast courses. Within the logic of this proposed study, it seemed desirable to try to find out why adults who enrolled on a part-time basis only did not enroll in the televised courses. This was not a necessary element of the study, but rather a useful bonus, and data were gathered with this bonus effect in mind.

As the data were being analysed, it became unavoidably clear that significant sociological and reactive differences existed between populations of adults who enroll in on-campus courses, and those who enroll in televised courses (in addition to or independent of on-campus course enrollment). Furthermore, detailed analyses failed to reveal any factor or combination of factors that differentiate occasional from persistent telecast course enrollees, i.e., those who enroll for one, two, three, four or more courses. With the data at hand, determinants were maddeningly elusive. This combination of effects of preliminary data analyses resulted in a redefinition of the problem in terms of choice of strategies.

Instrumentation, Sampling, and Analytical Procedures

The basic research instrument was a 28-item questionnaire covering a range of sociological characteristics, reasons for seeking credit and/or degrees, prior college education, amount of college education of spouse and

friends, preferences for on-campus or televised courses, distance of residence from the campus, time of viewing if alternative times were available, etc. This questionnaire, with a covering letter and enclosed return envelope, was mailed to all 251 adults who had enrolled in telecast courses.

A parallel-item questionnaire was prepared for adults enrolling in on-campus courses of the College of General Studies. Appropriate variations were made in five of the 28 items in terms of their relevance to on-campus-only and televised courses. An accompanying letter and return envelope were also included in this questionnaire package.

Complex problems relating to a wide range of variables arose in sampling the universe of adults who had enrolled in on-campus courses during the time the televised courses were offered (Fall 1959 - Fall 1963). These problems were excessive to the intended use of the information solicited. To avoid these excessive problems of sampling, the assumption was made that on-campus course enrollees in the Fall 1963 term were representative of the aggregate of on-campus course enrollees over several terms. On this basis, then, the questionnaire was mailed to a 12 percent random sample (N=212) of on-campus enrollees in the Fall 1963 semester only.

When the problem was reformulated as that of choice between strategies, this sampling assumption became more critical. The one characteristic of the universe of on-campus enrollees on which records were available for the past three years was that of sex. The proportion of females in the on-campus sample was somewhat greater than that of the universe of the Fall 1963 term, but a check of term by term enrollment of the sample over the three-year period revealed close-to-identical proportions of males and females of the sample and of the universe of the Fall and Spring terms over three years.

This proportion was found to be highly stable, term by term--approximately 55 percent females and 45 percent males. In view of the stability of male-female proportions in the on-campus student universe, the close match of the Fall 1963 on-campus enrollees is regarded as corroborative support of the assumption of its representativeness.

Nevertheless, it must be emphasized that all comparative data and all statements based on these data are only as valid as this assumption and must be read with this reservation in mind. Furthermore, while the rate of questionnaire return was high, a selective factor of unknown identity operated, and this further limits the generalizability of the data reported and interpreted.

Contingency analysis is used in most data analyses. This method of analysis is versatile and adequate to the kind of data gathered in this study. The conventional χ^2 procedure is used with non-scaled data, and the Kolmogorov-Smirnov analysis, with χ^2 conversion, is used on scaled data. In general, the .05 level of confidence is the criterion of significant differences, and approximations are regarded as tendencies toward significant differences.

Topical Analyses and Reporting *

In this part of the report, data dealing with two of the three dimensions of behavior of adults choosing between on-campus and telecast strategies are discussed: (1) sociological characteristics, such as age, marriage, income, previous education, distance of residence from the campus, etc.; and (2) reactive behavior, such as rate of response to the questionnaire, estimated time spent in completing the questionnaire, commitment to earning a college degree, and growth and decline of acceptance of television as a strategy of instruction associated with number of televised courses in which enrolled.

In preparing this report, the writer is slightly brushed with the human feeling of St. John as he wrote the fourth Gospel. The omitted data are voluminous, yet their omission does not substantially reduce the relevant content of the message, nor would their inclusion substantially enhance it. Here the feeling of identification with St. John ceases. He had both a more exalted subject and a more profound message to report, and, according to long-existant doctrine, wrote under higher inspiration.

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* Relevant tables omitted from the body of this report will be found in the Appendix.

II. SOCIOLOGICAL BACKGROUNDS

Regardless of their strategy of earning college credits, most enrollees in on-campus courses or in televised courses are adults, most of whom are fully employed, either for salaries, wages, or fees, or as housewives. College education for them is a part-time activity, added to busy schedules. Some are young adults. A few are pre-adults. Others are pushing 60 from either direction.

Some have attended college on a full-time basis and dropped out for one or more of a variety of reasons which, interestingly, rarely include academic deficiencies. If the academic road became too rough, very few say so. Educational failure is viewed by middle class society as a stigma arising from a transgression of the rule of equality of man.

Common Characteristics

In an evening division of a college, or within a day or resident college, it is to be expected that several areas of sociological homogeneity will be found. Somehow or other, a college becomes selective on bases other than purely academic admission and performance requirements. Each college acquires a character of its own. This character is the product of the interaction of the past with the present, of who went there with who goes there, or who did well there with who did poorly there, of the college's hierarchical status in the academic pyramid, and of other durable threads of historical continuity.

In this context, it is to be expected that choice of strategy in college education, i.e., enrollment or non-enrollment in televised courses, is often secondary to the choice of college attended or to special needs for a few college credits for job-holding or promotion.

From this it follows that both on-campus and televised course enrollees will have more common than differential sociological characteristics. This logical deduction is facilitated by the results of the analyses of data. The fact

is that the data were gathered and analysed to disclose the common and differential characteristics, and that several of the differences found were not those anticipated when the research was designed.

Female-Male Ratio

For some reason that deserves looking into, women outnumber men by a small percentage in both on-campus and televised courses of the College of General Studies, but there is no significant difference (in the samples taken) between female-male proportions enrolled only on-campus and those enrolled in televised courses.

Including or excluding televised courses, the College of General Studies is a co-educational institution. The higher proportion of women to men may be related to the fact (discussed in a later section) that there is a consistent difference in amount of college education of husbands than wives. Betty Friedan's jaundiced evaluation of The Feminine Mystique (3) might be drawn into the picture as a contributing influence were it not that women outnumbered men in CGS prior to publication of her contribution to the amorphous category of non-fiction.

The popular concept of the resident undergraduate college as a marriage mart for the post-pubescent also seems to have little validity in the empirical data on the ratio of unmarried males and females enrolled part-time in the College of General Studies. Among men in on-campus courses, most are married. Among women, most are single. The odds are against the mate-seeking female on the campus hunting grounds. This could make the hunting more competitive for the female and add to its zest, but the plausibility of this hypothesis is somewhat strained.

At this level of inquiry, the female-male ratio in both on-campus and televised courses is accepted as a descriptive datum.

Family Income

The distribution of family income of on-campus and televised course enrollees is strikingly similar. Some of the questionnaire respondents may

have yielded to the temptation to exaggerate the magnitude of family income, but the data suggest that such exaggeration, if any, was a stable tendency among both on-campus and televised course enrollees.

Table I: FAMILY INCOME

$ Income	Mode of Instruction: Television N	Television %	Television Cum.%	On-Campus N	On-Campus %	On-Campus Cum.%	Diff. in Cum. %
5,500-less	24	15	15	29	22	22	7
5,600-6,500	11	7	22	14	10	32	10
6,600-7,500	17	11	33	11	8	40	7
7,600-8,500	14	9	42	12	9	49	7
8,600-9,500	15	9	51	8	6	55	4
9,600-10,500	14	9	60	15	11	66	6
10,600 +	64	40	100	45	34	100	0

$\chi^2 = 2.90$ 2df $p > .20$

Table I shows that the highest percentage of family income of those choosing either strategy is in the highest bracket of $10,600 and greater. A much smaller peak is in the lowest bracket. In between these two extremes of family income, is a dreary, jagged plateau. The median family income of both strategy groups is in the $8,600 - 9,500 bracket--clearly indicating that the average family income is above that of the metropolitan area. CGS is not, by these figures, an effective instrument in the educational war against poverty. For all their economical advantages, televised courses tend to have little effective appeal to those with family incomes less than $5,500. Any such economically-based attraction seems to be that of thrift. As data to be reported in subsequent sections will indicate, course attraction appears to derive from a more complex nexus of sociological and psychological factors.

Prior Education

In two dimensions of prior education--proportion of college graduates enrolled in undergraduate CGS courses, and proportion of students having previously attended college on a full-time basis but not completing degree requirements--there is no significant difference between students enrolled exclusively in on-campus and those enrolling in telecast courses.

College graduates comprise 14 percent of those taking undergraduate telecast courses and 20 percent of those in undergraduate on-campus courses. No matter how incongruous this may be with the notion that a degree earned requires a second degree aspiration and appropriate differential course-level enrollment, it remains an obstinate fact. Many adults apparently choose their own level of continuing higher education for their own reasons, or for reasons imposed on them by managers, bureaucrats, and other rule-makers.

Roughly half the on-campus (51 percent) and televised (46 percent) course enrollees had attended college on a full-time basis and dropped out for one reason or another. Enrollment in CGS courses represents a recovery from the drop-out syndrome, and, in some cases at least, reflects the general trend of college drop-outs to continue their college education by the evening school route.

Reasons for dropping out of full-time college attendance add up to a long list, of which the two most frequently mentioned were finances and marriage--the latter most prevalent among females. Among those who returned questionnaires, only one among telecast enrollees and only one among on-campus enrollees reported dropping out of full-time college attendance for scholastic reasons. The essential point, however, is not the reason for dropping out but the fact of return to college and the instrumentality of a part-time college in this socially-important phenomenon. For most of the adults involved, this return to college is done under a set of obligations and commitments to a full-time work schedule for self or family support, and thus constitutes an addition of time and activity to the work day and work week.

Primary Group Educational Norm

Two lines of evidence suggest that adults choosing either or both strategies of instruction may act under some pressure of conformity to primary group norms to increase their amount of formally accredited college education.

Among both married and single respondents, between 85 and 90 percent reported most or some friends as having a college degree. Only 15 percent of on-campus and only 10 percent of television course enrollees report few or none of their friends with no college degree.

Among married men and women, enrolled under either mode of instruction, husbands have more college education than wives. This proportion is high--over 75 percent.

The husband-wife differential in amount of college education easily leads to a heads-you-win--tails-you-lose pattern of reasoning. Wives seek more education to improve their status and chit-chat skills with husband and husband's friends, so the inference goes. This logic requires the corresponding inference that husbands continue to increase their already greater amount of college education to preserve or increase educational status superiority over wives.

Both these inferences are simplistic but enticing. Mass media, including advertising content, make it clear that the American husband is a Dagwood, outwitted by his more brilliant, self-contained, and competent wife, children, and dog(s), and by more clever neighbors. Advanced education could serve, among other things, as a symbol of male assertiveness and dominance in a culture where the male is not pictured as the respected head of the family but as its human doormat.

It is imprudent and misleading to overplay the contributing influence of the educational norm of husbands and friends in the continuing education of adults. Nevertheless reference group theory suggests that somehow--perhaps in different ways and with different intensity--the level of college education of spouse and of friends is likely to be one of the several interacting social forces that provide incentive and reinforcement for continuing education at the college level.

Differential Characteristics

Apart from reactive differences, to be discussed in Chapter III, four significant characteristic differences are found between those choosing televised courses and those enrolling in on-campus courses only--age, marriage, distance of residence from the campus, and pattern of college attendance.

The commonalities in male-female ratio, family income, prior education, and education of spouse and friends provide a core of cohesion of adults engaging in continuing liberal education (in the College of General Studies).

Differences between those enrolling in on-campus courses only and those enrolling in televised courses are such as to set the latter apart, not only for their acceptance of educational innovation, but as people whose station in life contributes, or seems to contribute, to the trial of innovation. It is popularly believed that innovation is a domain exclusive to the young. The data of this study indicate the technological innovation of television in education is, in fact, rejected by the young, and at least tried, if not fully accepted, by those who have lost the blush and brashness of youth and by whom the cost of inertia must be carefully counted.

Age

Table II : AGE DISTRIBUTION

Age	Mode of Instruction: Television			Mode of Instruction: On-Campus			Diff. in Cum. %
	N	%	Cum.%	N	%	Cum.%	
16-20	2	1	1	28	18	18	17
21-25	23	14	15	53	35	53	38
26-35	48	30	45	36	24	77	32
36-45	47	29	74	22	14	91	17
46-55	32	20	94	10	7	98	4
55+	10	6	100	3	2	100	0

$\chi^2 = 45.29$ 2 df $p < .001$

Age distribution of those choosing each of the two alternative strategies is shown in Table II above. Differences in percentages of those under and over 25 years are dramatically revealing of the consistent pattern of greater age among the telecast course enrollees.

Obviously, televised courses are not patronized to an appreciable extent by young adults, 25 and under, and on-campus courses attract a relatively low proportion from those over 35.

Marriage

With age comes marriage. So, it comes as no surprise that a substantially higher proportion of adults enrolled in televised courses are married (72 percent) while a lesser but still substantial proportion of on-campus enrollees are single (62 percent). The difference in distribution of single and married enrollees is highly significant ($p < .001$). As previously reported (4), marriages are stable; only a small percentage is broken by divorce or death of spouse.

In passing, it is remarked that the categories of single, married, and divorced and widowed are so coldly abstract as to be offensive to both human dignity and the human condition. They convey less information than the names of the suits of a deck of cards.

One of the amusing sidelights of responses to these categories of connubiality was the reaction to the omission of the "engaged" category. Several young women inserted a note in the questionnaire indicating that while they were not married, they were engaged to be married. Among other things, this sort of distinctive information increases confidence in the validity of questionnaire responses.

Distance from Campus

Since television is an area medium, transmitting a signal in a straight line on a 60+ mile radius, it is to be expected that this electronic property of the medium would be accompanied by a distribution of distance from residence

to campus of televised course enrollees different than distance distribution of on-campus enrollees. In less ponderous terms, more television enrollees would be expected to live farther from the campus than on-campus enrollees.

Distribution of distance of residence from the campus is shown in Table III below. The distance reported in this table is straight line distance rather than actual and practical travel distance. Respondents showed an error tendency in estimating both mileage distance and time of travel from residence to campus. To reduce error, distance was measured on a scaled map by straight line, and travel time was discarded as a measure since no convenient means of error correction was available.

Table III : DISTANCE FROM UNIVERSITY CAMPUS

Miles	Mode of Instruction: Television			On-Campus			Diff. in Cum. %
	N	%	Cum.%	N	%	Cum.%	
0-5	25	16	16	62	41	41	25
6-10	41	25	41	39	26	67	26
11-15	43	27	68	31	20	87	19
16-20	12	7	75	10	7	94	19
21-25	14	9	84	4	3	97	13
26-30	7	4	88	0	0	97	9
31-35	7	4	92	3	2	99	7
36+	13	8	100	2	1	100	0

$\chi^2 = 22.86$ 2 df $p < .001$

Within the limitations of sampling procedure, the data on distance of residence to campus indicate that (a) the College of General Studies is a community college serving an adult population, nearly 90 percent of whom reside within 15 miles of the campus, and (b) a significantly larger proportion of students enrolled in telecast courses reside farther from the University campus than do students enrolled only in on-campus courses.

These data provide an empirical basis for redefining an educational role of television from that of a mass medium serving the recreational, informational, and respite needs of a huge, heterogeneous audience, to that of an area medium serving the seriously intellectual, specialized interests and needs of a relatively small, homogeneous audience.

The distinction between television as an area medium catering to specialized interests and television as a mass medium catering to common interests helps to, or may help to, eliminate the confusion of criteria which has led sociologists and educational television advocates to appraise the actual role of educational television with disappointment because it is patronized by such a small percentage of the adult population.

Attendance Patterns

In the above categories in which on-campus-only and televised course enrollees were significantly different, it is apparent that age, marriage, and distance of residence from the campus are related to the convenience of televised courses reported in a previous study of the audience for these courses (4).

Maturation, the marriage state, and residential withdrawal from the congested city are accompanied by physical and social changes which restrict personal mobility, increase adult responsibilities, and consume family income. Thus, when the mountain comes to Mohammed as it does when the University comes to the student at home by television, physical and social inconveniences of college class attendance are reduced.

The neatness of these determinants of audience formation is compelling and misleading. They help to, but in themselves do not sufficiently explain (in the sense of describing more completely) the relevant circumstances of those who enroll in telecast courses. Some of these relevant circumstances are found in what may loosely be categorized as a pattern of college attendance. There are at least four elements in this pattern: (a) number of semesters attended during the past five years, (b) colleges attended during this timespan, (c) amount of credits accumulated to date, and (d) period of first

enrollment among those attending college on a part-time basis only.

Semester Attendance. Both telecast and on-campus enrollees were asked to indicate the semesters (including summer terms) during which they had enrolled for course credit anywhere and under any mode of instruction from Fall 1959 to and including Fall 1963. The semester attendance pattern is shown in Table IV.

Table IV : ATTENDANCE PATTERN BY NUMBER OF SEMESTERS ATTENDED

	Mode of Instruction						Diff. in Cum. %
No. of	Television			On-Campus			
Sems.	N	%	Cum.%	N	%	Cum.%	
1	52	32	32	34	22	22	10
2	26	16	48	8	5	27	21
3	13	8	56	11	7	34	22
4	17	11	67	18	12	46	21
5	10	6	73	15	10	56	17
6	7	4	77	14	9	65	12
7	7	4	81	11	7	72	9
8	7	4	85	8	6	78	7
9	12	8	93	18	12	90	3
10	6	4	97	6	4	94	3
11	2	1	98	7	5	99	1
12	3	2	100	2	1	100	0

$\chi^2 = 15.18$ 2 df $p < .001$

Nearly half (48 percent) of the telecast course enrollees had attended only one or two semesters during this period, but only one out of four (27 percent) on-campus enrollees attended only one or two semesters. Telecast course enrollees adopt a much more sporadic pattern of semester attendance than do on-campus-only enrollees.

From the above table it is clear that the "onceness" pattern of attendance of both telecast course enrollees and viewers, noted in a previous study (4), reflects a general pattern of sporadic college attendance characteristic of telecast course enrollees. "Onceness" refers to attendance of only one telecast course, or during only one semester, out of all possible telecast courses and semesters during which they were aired.

In tabulating the responses on semester attendance, questions arose as to the validity of the data on the telecast enrollees. A large number did not indicate any course (other than telecast courses) taken. However, examination of the questionnaires revealed that all but five of these respondents had in one way or another explicitly indicated that they had enrolled in no non-telecast courses during the period covered. This dismissed the disturbing doubt on the validity of the questionnaire responses, and the tabulated data in Table IV were accepted as a reasonably accurate record of semesters of college attendance. More precisely, they were accepted as an accurate record of the number of college semesters enrollees say they attended during the period specified.

Colleges Attended. Not only is the semester attendance of telecast course enrollees significantly more sporadic than that of on-campus-only enrollees, but the proportion attending a variety of colleges is also significantly smaller ($p < .01$). Among telecast course enrollees, 72 percent attended the University of Pennsylvania only between the Fall, 1959 and the Fall of 1963, whereas 58 percent of the on-campus enrollees limited their college attendance to the University. Thus, approximately four out of 10 on-campus enrollees attended the University of Pennsylvania and at least one other college or university during the period that telecast courses were offered, and approximately three out of 10 telecast enrollees took courses on some other campus as well.

The lesser tendency of telecast course enrollees to migrate among campuses fits the general pattern already indicated by frequency of semester attendance. In both ways, college attendance is restricted.

Amount of College Credits Accumulated. From the attendance pattern, it may be expected that telecast course enrollees without college degrees prior to enrollment will have accumulated fewer college credits than the more regularly attending on-campus-only enrollees. This, however, is not the case. Table V shows the distribution of earned college credits as estimated by questionnaire respondents.

Table V : AMOUNT OF CREDIT ACCRETION

No. of Credits	Mode of Instruction						Diff. in Cum. %
	Television			On-Campus			
	N	%	Cum.%	N	%	Cum. %	
20-less	26	20	20	48	45	45	25
21-40	15	12	32	19	18	63	31
41-60	13	10	42	5	5	68	26
61-80	23	18	60	11	10	78	18
81-100	13	10	70	10	9	87	17
101-120	11	9	79	9	8	95	16
121 +	26	20	99	5	5	100	1

$\chi^2 = 22.32$ 2 df $p < .001$

Slightly less than half (45 percent) of the on-campus students reported the number of earned credits as 20 or fewer, and one-fifth (20 percent) of the telecast enrollees reported the number of earned credits within this lowest scale interval. In the highest scale interval (121+), which approaches and includes the number of credits required for the baccalaureate degree, are 20 percent of the telecast and only five percent of the on-campus enrollees. The relevance of this proportion approaching or attaining the number of credits required for a degree will be discussed in Chapter III, dealing with reactive behavior of adults employing the strategy of telecast courses and those rejecting it.

While age, marriage, and distance from the campus play a demonstrable role in choice of strategy for earning college credits, it is increasingly evident from the data that sole reliance on these demographic determinants in accounting for this choice is made at the expense of ignoring other critical variables.

Year of Initial College Enrollment. Those enrolled either in telecast or on-campus-only courses who had attended college on a part-time basis only were asked to indicate the first year they had enrolled for credit in

college. Based on their older age, the expectation is that telecast enrollees would have undertaken their college careers earlier than the on-campus-only enrollees, and the question is how much earlier. The expectation is borne out and the question is answered in Table VI on the following page.

In contrast to the occasional pattern of enrollment reported by adults enrolling for credit in televised courses between Fall, 1959, and Fall, 1963, the data on year of initial enrollment highlight duration of enrollment over a longer time period as a characteristic of part-time students enrolled in televised courses.

The phenomenon of distributing a college career over a period of as great as 30 or more years is anathema to the academic mind engulfed in the rapidity of change in the conceptual content of the physical and social sciences, mathematics, and other disciplines. Volume and rapidity of change renders courses taught one or several decades ago somewhat obsolete. No one has proposed that all baccalaureate degrees granted prior to some arbitrary recent date be revoked, nor has any major movement developed to provide appropriate courses for up-dating the education of adults except those professionally employed in highly technical fields. Even in this latter area, the most compelling and extensive efforts are being made by large corporations through such academically competing institutions as Sperry Gyroscope's SPACE program of continuing education.

The point of digression into relevance and meaning of these research data is that continuing liberal education of adults involving degree programs may, and in all probability does, require modification in the rules of degree requirements and of curricula if those who pursue it most enduringly are not to be penalized for their durability, or for the obsolescence of yesteryear's courses in today's world, or for the fact that they are gainfully employed and self-supporting in their college careers undertaken on a part-time basis.

Table VI indicates the problem is most acute for adults enrolled in the telecast courses but it is only a matter of time before those enrolled in on-campus courses only either drop-out of their part-time college career or

confront the problem of the obsolescent curriculum for the liberal education of adults. There is evidence in the questionnaires and elsewhere that this problem also exists for those with some prior full-time college attendance who are continuing their education on a part-time basis.

Table VI: YEAR OF FIRST ENROLLMENT AS PART-TIME STUDENTS

Year 1st Enrolled	Mode of Instruction: Television N	Television %	Television Cum.%	On-Campus N	On-Campus %	On-Campus Cum.%	Diff. in Cum. %
Before 1934	5	8	8	0	0	0	8
1934-38	3	5	13	1	1	1	12
1939-43	6	10	23	0	0	1	22
1944-48	4	7	30	3	4	5	25
1949-53	13	21	51	5	7	12	39
1954-58	17	28	79	10	14	26	53
1959-63	13	21	100	53	74	100	0

$\chi^2 = 35.71$ 2 df $p < .001$

Summary and Significance

In sum, then, the attendance pattern of telecast enrollees is irregular, and largely confined to the University, but is undertaken with a greater accumulation of earned college credits and a history of enrollment in college courses over a greater number of years.

Significantly higher proportions of telecast course enrollees are older, married, and live farther away from the campus than do those who enroll in on-campus courses only. The coincidence of demographic and educational characteristics becomes obvious after discovery, but was not predicted a priori.

While the number enrolling for college credit in televised courses is absolutely small and relatively trivial, the telecasting of college credit courses constitutes a significant breakthrough in realism and relevance in the liberal education of adults within the more or less standard curricula provided for young, resident undergraduate students.

III. REACTIVE BEHAVIOR

The fact that adults elect to enroll in telecast courses in itself constitutes reactive behavior different from that of adults who enroll only in on-campus courses. Given the choice between the social situation of the on-campus classroom and the individual situation of at-home viewing of a college course in abbreviated presentational time, one set of individuals accepts the latter and the other rejects it. The reaction to the choice--assuming it is a feasible choice--differs.

Not to labor this fact, but to clarify it, the further facts are that 70 percent of the on-campus-only students indicated in the questionnaire that they knew that telecast courses were offered. Three-quarters of these (74 percent) indicated that they did not look for more detailed information on the televised courses, ask anyone about such courses, or in any way seek information and/or advice. Again assuming that a feasible choice existed, e.g., the courses offered could or would satisfy academic, personal interest, or vocational requirements or criteria, it seems clear that a substantial proportion of the on-campus-only enrollees were aware of the alternative strategy of instruction and rejected it.

From this it may be expected, but not necessarily so, that on-campus-only and telecast course enrollees would exhibit other significantly different reactive patterns. For example, their verbal commitment to acquire educational symbols, e.g., a college degree, might be greater or less. They might differ in their reactions to the questionnaire in such ways as to suggest greater or less integration into the complex fabric of the university. And they might differ in their acceptance of television as a mode of instruction in a linear or curvilinear relationship to the number of telecast courses taken, including the number zero.

Verbal Commitment to a Degree

In the questionnaires sent to both samples used in this study, the question was asked whether at the time they first enrolled (either in an on-

campus course, in the one instance, or a televised course, in the other) they were or were not working for a college degree. This question involves not only verbal commitment to earning a college degree, but the existence or ascription of this commitment at the time of initial enrollment.

As may be anticipated from their greater age, duration of enrollment, and estimated number of accumulated credits, significantly higher proportion ($p < .001$) of telecast enrollees (77 percent vs. 59 percent) indicated that they were working for a degree when they first enrolled in telecast courses. This indicates that a higher proportion of adults, not already having earned a college degree, stated that when they initially enrolled in a telecast course, they had made a commitment to the goal of a college degree. Such a commitment may be regarded as a highly probable but not certain, i.e., necessary, precondition of telecast course enrollment. At least, commitment to the goal of a degree may be reasonably regarded as a strong factor in the selective appeal of telecast courses.

The time of commitment to the degree goal must be treated with caution. Strictly speaking, time of degree commitment is not comparable between telecast and on-campus-only enrollees in the context and wording of the item in the questionnaire. A large number of adults enrolled in telecast courses had previously enrolled in on-campus courses at the University of Pennsylvania or some other college, university, or technical or vocational institute. Consequently, the date of their initial enrollment in a college course(s) is earlier than the date of their initial enrollment in telecast courses.

A significant correction of proportions of students in on-campus-only and telecast courses having (verbally) committed themselves to a degree goal is found in inserted questionnaire responses indicating that, subsequent to their initial course enrollment, enrollees made the commitment to the degree goal. With this correction, the significance of the difference in the time of commitment between the two sets of adult students is reduced to $p < .10$.

At some point in their college career, a high proportion of adults attending a college established to serve the liberal education needs of men and

women who can attend on a part-time basis only, apparently commit themselves to the attainment of the symbol of the educated adult--a baccalaureate degree. The ceremonial conferral of this degree elaborates the symbol with additional colorful, spectacular, symbolic trappings.

It will be recalled that in Table V, 20 percent of the telecast course enrollees estimated the number of earned college credits as 121 or more. This indicates that one out of five were within sight or grasp of their baccalaureate degree at the time this survey was made (late Fall, 1963), and lends support to the notion that when respondents <u>say</u> they are working for a college degree, they <u>are</u>.

Telecast course enrollees were asked in the questionnaire to indicate whether they had in fact earned a degree subsequent to enrollment in telecast courses. Here, again 23 percent of those who could have earned a baccalaureate degree within the time period that Television Seminar courses have been broadcast, reported that they did so, generally specifying the degree, the college, and the year of conferral.

Taken together, these strongly suggest that (a) verbal statement of commitment to earning a degree represents a real commitment to an achievable goal, and (b) the telecast courses serve a facilitating function in the fulfillment of this commitment.

<u>Time Spent on Questionnaire</u>

Commitment involves not only a clear goal or purpose, but also expenditure of effort and making sacrifices that goal attainment requires (5). Completing and returning the questionnaire used as the basic instrument of this study involves effort and time which, conceivably, could be used for habitual activities of a more pleasant or less unpleasant sort.

Estimated time spent in filling-in the information requested in the questionnaire is thus a relevant index to commitment, not to a specific course

or a college degree, but to a non-instructional function of the university with which the respondents are affiliated by course enrollment, and to a non-critical and non-influential course-related activity.

The accuracy of the estimate of spent time is unimportant, although there is internal evidence that the estimates are reasonably accurate. The spent time estimate is taken as reactive behavior, and this reactive pattern of adults enrolled in on-campus-only and in televised courses is analysed for significant difference in distribution of time estimates. Data in Table VII below were supplied by the respondents in answer to the last question included in the questionnaire: "How long did it take you to answer this questionnaire?"

There is little point to saying in words what Table VII says in numbers. The distribution of estimated spent time indicates that a higher proportion of telecast enrollees stated that they took more than 15 minutes to complete the questionnaire. The significance of difference in the distribution is well below the .05 criterion level.

Table VII: ESTIMATED TIME OF QUESTIONNAIRE COMPLETION

Time Spent In Mins.	Mode of Instruction: Television			On-Campus			Diff. in Cum. %
	N	%	Cum.%	N	%	Cum.%	
5-less	22	14	14	22	15	15	1
6-10	35	23	37	46	32	47	10
11-15	36	23	60	43	30	77	17
16-20	21	14	74	17	12	89	15
21-25	6	4	78	4	3	92	14
26-30	18	12	90	11	7	99	9
30 +	15	10	100	2	1	100	0

$\chi^2 = 8.6$ 2df $p < .02$

This and other such tabulations unfortunately squeeze out some of the fascinating responses that make the research staff privy to somewhat acute domestic problems, hilarious academic run-arounds, work overloads, delightful garulity in tolerable single doses, eulogies on the virtues and values of a liberal college education, and other such miscellany. In some of these free responses, there is an unmistakable undercurrent of protest against perceived injustice, false values, irrationality and inconsistency. In such cases, the questionnaire may have served a therapeutic function, and the anonymous research staff may have, in a way, been seen as "significant others" who accept and respect the right of privacy.

Percentage and Rate of Response

It may reasonably be expected that if one set of students is more committed than another to an educational enterprise, the former will cooperate in an educationally related activity (a) more promptly, and (b) in higher proportion. From this it follows that a higher proportion of telecast enrollees will return completed questionnaires in a shorter time span than on-campus-only enrollees.

At this point occurs the Chisholm Effect, which derives from a set of three powerful laws. Chisholm's first law of Human Interaction (1) is "If anything can go wrong, it will." His second law of Human Interaction is equally if not more powerful: "When things are going well, something will go wrong." His third law deals with purposes and perversity and can be disregarded.

Detailed analyses of time lapse between date of mailing of questionnaires and date of their return show no consistent pattern which can be related to the strategies of telecast or on-campus-only enrollment.

When proportions returning questionnaires are analysed, the evidence strongly suggests that high or low proportion of return is not related to the characteristics of adults choosing between optional strategies but to the recency of the time of last course enrollment. The more remote in time from last

semester of course enrollment, the smaller the proportion returning the questionnaires.

No significant differences in reactive behavior in rate or proportion of questionnaire are found which can reasonably be related to the commitment hypothesis.

Acceptance of Instructional Television

Both sets of course enrollees were asked to indicate their preference for mode of instruction. Three options were given: prefer television, prefer on-campus courses, no preference (between the two).

As generally expected, those who enrolled in on-campus-only courses overwhelmingly (83 percent) preferred on-campus instruction. The unexpected datum is the 17 percent of the on-campus-only students who indicated either a preference for telecast courses or no preference between the two strategies of instruction. Asked why they had not enrolled in a telecast course, these students offered a variety of reasons--the courses offered did not match their degree requirements, the courses offered did not interest them, the hour was inconvenient, the procedure for enrollment was unknown, the teacher appeared to be uninspiring. Several did not reply to the question. At least one was disarmingly frank: "Haven't the slightest idea--I probably thought they were all given at the crack of dawn." All these reasons have one common element--they are unrelated to television as an instructional medium.

Those who enrolled at one time or another in a telecast course(s) divided about evenly (52 vs. 48 percent) in preferring television (or expressing no preference), or preferring on-campus courses. The preference for on-campus courses expressed by those enrolled only in on-campus courses (85 percent vs. 48 percent) is significantly different ($p < .05$) from that of those who enrolled in telecast courses.

Among telecast enrollees, no difference meeting the .05 criterion level of confidence was found in acceptance of telecast vs. on-campus courses

according to either number of telecast courses taken or number of semesters of enrollment in telecast courses. However, the percentage accepting television (by preference for television plus no preference) rises with the increase in number of telecast courses taken, up to and including the third course (see Table 17, Appendix). With four or more telecast courses, the percentage drops sharply. This suggests that there may be a point beyond which the strategy of telecast courses is chosen despite its non-preferential appeal.

Interpretation

Enthusiastic and favorable evaluation of such televised courses as offered on Continental Classroom, Television Seminar, etc., have been reported in prior audience reaction studies (2,4). Regardless of how this reaction may be explained or explained away--as rationalization, reduction of cognitive dissonance, the expression of conscious or self-conscious fulfillment--the reaction has been observed repeatedly in varying situations.

The focus of this study is on adults who <u>enroll</u> for college credit in telecast courses, not on the wider audience of both enrollees and auditors. Among enrollees, the significant response is not enthusiasm but commitment.

While televised courses are accepted (preferred or preferentially equivalent to on-campus courses) in significantly higher proportion among those who have enrolled in them than among those who have not, this acceptance is expressed by roughly half of those who have enrolled in televised courses. Given a free choice between telecast and on-campus courses, roughly half of the telecast course enrollees also prefer on-campus courses.

In itself, a significant observed difference in proportions of telecast vs. on-campus-only enrollees accepting television as an instructional strategy demonstrates the obvious, but left to itself, stops short of explaining it.

In certain patterns of reactive behavior discussed in this present chapter, the enthusiasm and favorable evaluation of college telecast courses noted in previous audience reaction studies appear to have been transformed among telecast course enrollees to a commitment in which a conjunction is established between self and university functions and values.

For a large proportion of those not already in possession of a college degree, commitment to the baccalaureate is a precondition of enrollment in telecast courses. One of the primary functions of telecast courses for those with such a commitment is thus the facilitation of the achievement of the symbolic goal of a bachelor's degree. This facilitating function is not the only function, nor necessarily the most socially or individually important function of telecast college courses. Within the context of this study and of the focus of educational use of television, it is a differentiating function.

Theoretical aspects of responses classified here as "reactive behavior" will be discussed in Part II of this report in light of what appears to be some underlying factors.

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APPENDIX OF TABLES

Table 1 : SEX DISTRIBUTION OF RESPONDENTS

Sex	Mode of Instruction: Television N	Television %	On-Campus N	On-Campus %
Male	57	35	60	39
Female	105	65	92	61

χ^2=.616 1 df p >.25

Table 2 : SEX DISTRIBUTION OF UNIVERSE OF TELECAST ENROLLEES AND SAMPLE OF ON-CAMPUS ENROLLEES

Sex	Mode of Instruction: Television N	Television %	On-Campus N	On-Campus %
Male	94	37	86	41
Female	161	63	122	59

χ^2= .97 1 df p >.25

Table 3 : SEX DISTRIBUTION OF UNIVERSE AND SAMPLE OF TELECAST ENROLLEES

Sex	Universe N	Universe %	Sample N	Sample %
Male	94	37	57	35
Female	161	63	105	65

χ^2= .12 1 df p >.50

Table 4 : SEX DISTRIBUTION OF TOTAL PART-TIME ON-CAMPUS ENROLLEES OVER FIVE SEMESTERS

	Male		Female	
	N	%	N	%
Spring 1964	741	41	1058	59
Fall 1963	983	47	1112	53
Spring 1963	766	49	812	51
Fall 1962	842	45	1030	55
Fall 1961	810	47	903	53
Total	4142	46	4915	54

Table 5 : MARITAL STATUS

Marital Status	Mode of Instruction			
	Television		On-Campus	
	N	%	N	%
Married	110	72	49	32
Single	35	22	94	62
Divorced/ Widowed	11	7	9	6

Married-Single $\chi^2 = 54.01$ 1 df $p < .001$

Table 6 : AGE AT INITIAL ENROLLMENT IN PART-TIME COLLEGE FROM FALL, 1957 TO FALL, 1963 ONLY

Age	Mode of Instruction						Diff. in Cum. %
	Television			On-Campus			
	N	%	Cum.%	N	%	Cum.%	
16-25	4	20	20	37	64	64	44
26-35	5	25	45	8	14	78	33
36-45	9	45	90	7	12	90	0
46-55	1	5	95	3	5	95	0
55 +	1	5	100	3	5	100	0

$\chi^2 = 11.93$ 2 df $p < .01$

Table 7 : ENROLLEES WITH AND WITHOUT COLLEGE DEGREE

	Mode of Instruction			
	Television		On-Campus	
	N	%	N	%
With Degree	22	14	30	20
No Degree	140	86	121	80

$\chi^2 = 2.23$ 1 df $p > .10$

Table 8 : FULL-TIME/PART-TIME COLLEGE ENROLLMENT BY TELECAST AND ON-CAMPUS ENROLLEES

	Mode of Instruction			
	Television		On-Campus	
	N	%	N	%
Some Full-time	82	51	69	46
Part-time Only	78	49	82	54

$\chi^2 = .95$ 1 df $p > .25$

Table 9 : EDUCATION OF FRIENDS

Friends Have Degree	Mode of Instruction						Diff. in Cum. %
	Television			On-Campus			
	N	%	Cum.%	N	%	Cum.%	
Most	91	58	58	80	57	57	1
Some	50	32	90	39	28	85	5
Few	13	9	99	18	13	98	1
None	2	1	100	3	2	100	0
Friends Have Some College but No Degree							
Most	19	25	25	21	28	28	3
Some	40	53	78	35	46	74	4
Few	16	21	99	20	26	100	1
None	1	1	100	0	0	100	0

Table 10 : REASONS FOR DROPPING OUT OF FULL-TIME COLLEGE

Reasons	Mode of Instruction			
	Television		On-Campus	
	N	%	N	%
Financial	19	26	18	38
Lack of Interest	6	8	7	15
Family Problems	8	10	5	11
To get Married	25	34	8	17
Other	16	22	9	19

Table 11 : AMOUNT OF COLLEGE EDUCATION OF SPOUSE

	Mode of Instruction							
	Television				On-Campus			
	Husband		Wife		Husband		Wife	
	N	%	N	%	N	%	N	%
More College Than Spouse	35	90	20	28	22	76	5	25
Less College Than Spouse	4	10	51	72	7	24	15	75

Telecast: Husband-Wife $\chi^2_y = 35.75$ 1 df $p < .001$

On-Campus: Husband-Wife $\chi^2_y = 10.36$ 1 df $p < .01$

Table 12 : DEGREE AIM AT TIME OF INITIAL ENROLLMENT IN TELECAST VS. ON-CAMPUS COURSES

	Mode of Instruction			
	Television		On-Campus	
	N	%	N	%
Working for Degree	100	77	69	59
Not Working for Degree	27	21	48	41
Not Certain	3	2		

Yes-No $\chi^2 = 11.67$ 1 df $p < .001$

Table 13 : CORRECTED DEGREE AIM BY TELECAST VS. ON-CAMPUS ENROLLEES*

	Mode of Instruction			
	Television		On-Campus	
	N	%	N	%
Working for Degree	105	81	83	71
Not Working for Degree	25	19	34	29

$\chi^2 = 3.27$ 1 df $p < .10$

* Includes those working for degree at time of enrollment plus those deciding to work for degree after initial enrollment.

Table 14 : PROPORTION OF TELECAST ENROLLEES EARNING BACHELOR'S DEGREE 1960-63*

Telecast Enrollees 1959-63 Without Degrees	103
Telecast Enrollees Earning Degrees 1960-63	24
Percent Earning Degrees	$\frac{24}{103}$ = 23%

* Fall 1963 enrollees without degree excluded from table as ineligible for degree in calendar year 1963.

Table 15 : ACCEPTABILITY OF TELEVISION COURSES

	Mode of Instruction			
	Television		On-Campus	
	N	%	N	%
Prefer TV & No Preference	79	52	25	17
Prefer Regular Classroom Inst.	73	48	123	83

χ^2 = 4.07 1 df $p < .05$

Table 16 : ACCEPTABILITY OF TELECAST COURSES BY NUMBER OF TELEVISION TERMS ATTENDED

No. of TV Terms	Course-Viewing Preference: TV & No Preference N	TV & No Preference %	On-Campus N	On-Campus %
1	44	52	41	48
2	20	56	16	44
3	9	56	7	44
4 +	6	40	9	60

NS for all combinations of 1 through 4 + calculated by TV · NP vs. O-C.

Table 17 : ACCEPTABILITY OF TELECAST COURSES BY NUMBER OF TELEVISION COURSES TAKEN

No. of TV Courses	Course-Viewing Preference: TV & No Preference N	TV & No Preference %	On-Campus N	On-Campus %
1	36	51	34	49
2	23	59	16	41
3	12	63	7	37
4 +	8	33	16	67

TV + NP vs. O-C 2-4 + $\chi^2_y = 2.93$ 1 df $p < .10$

NS for all other combinations

Table 18 : PROPORTION OF ON-CAMPUS ENROLLEES WHO KNEW ABOUT TELECAST COURSES

	N	%
Knew About Telecast Courses	107	70
Did not Know About Telecast Courses	44	30

Table 19 : PROPORTION OF ON-CAMPUS ENROLLEES WHO SOUGHT FURTHER INFORMATION ON TELECAST COURSES

	N	%
Sought More Information	28	26
Did not seek More Information	79	74

Table 20 : ESTIMATED TIME SPENT ON QUESTIONNAIRE BY FALL 1963 TELECAST VS. ON-CAMPUS ENROLLEES

Time Spent in Minutes	Mode of Instruction: Television (Fall 1963) N	%	Cum.%	On-Campus N	%	Cum.%	Diff. in Cum. %
5-less	4	10	10	22	15	15	5
6-10	10	26	36	46	32	47	11
11-15	9	23	59	43	30	77	18
16-20	4	10	69	17	12	89	20
21-25	2	5	74	4	3	92	18
26-30	0	0	74	11	7	99	25
31+	10	26	100	2	1	100	0

$\chi^2 = 7.75$ 2 df $p < .05$

Table 21 : DISTANCE OF RESIDENCE FROM UNIVERSITY CAMPUS

Distance In Miles	Mode of Instruction: Television (Fall 1963) N	%	Cum.%	On-Campus N	%	Cum.%	Diff. in Cum. %
0-5	2	5	5	62	41	41	36
6-10	12	28	33	39	26	67	34
11-15	15	35	68	31	20	87	19
16-20	3	7	75	10	7	94	19
21-25	3	7	82	4	3	97	15
26-30	4	9	91	0	0	97	6
31-35	1	2	93	3	2	99	6
36 +	3	7	100	2	1	100	0

$\chi^2 = 17.34$ 2 df $p < .001$

Table 22 : ENROLLMENT IN THE UNIVERSITY OF PENNSYLVANIA AND OTHER SCHOOLS

	Mode of Instruction: Television N	%	On-Campus N	%
Univ. of Penn. Only	117	72	88	58
Univ. of Penn. & Other Schools	45	28	64	42

$\chi^2 = 7.10$ 1 df $p < .005$

Table 23 : PROPORTIONS RETURNING QUESTIONNAIRES BY DATE OF LAST ENROLLMENT*

Year Last Enrolled	Mode of Instruction: Television N	Television %	On-Campus N	On-Campus %
1963	62	86	154	73
1962	28	70		
1961	31	58		
1960	32	62		
1959	11	52		

* Questionnaires were mailed to Telecast enrollees on November 14, 1963, during the Fall trimester, and to On-Campus enrollees on January 13,1964, after the close of Fall trimester.

Table 24 : RATE OF RETURN OF QUESTIONNAIRES BY WEEKS AFTER MAILING

	Mode of Instruction: Television Cum.N	Television Cum.%	On-Campus Cum.N	On-Campus Cum.%	Diff. in Cum. %
First Week	65	27	65	31	4
Second Week	104	44	109	52	8
Third Week	114	48	115	55	7
Fourth Week	138	58	118	56	2
Fifth Week	150	63	143	68	5
Sixth Week	151	63	150	71	8
Seventh Week	157	64	151	72	8
Eighth Week	160	67	152	72	5
Ninth Week	160	67	153	73	6
Tenth Week	162	68	154	73	5
Eleventh Week	164	69	154	73	4
TOTAL	164	69	154	73	